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Via the ECFS

09 September 2012

Mr. Julius Knapp
Chief, Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554 USA

Subject: WHITESPACE ALLIANCE COMMENTS ENDORSING LICENSE-EXEMPT USAGE OF THE TELEVISION BAND WHITE SPACES

1. WhiteSpace Alliance™ (WSA) respectfully submits its comments endorsing *license-exempt¹ use as well as opportunistic use of licensed spectrum by cognitive license-exempt devices in the Television Bands.*
2. The mission of the WhiteSpace Alliance™ (www.WhiteSpaceAlliance.org) is to promote the development, deployment and use of standards based products and services as a means of providing broadband capabilities using the WhiteSpace spectrum. By promoting the use of standards, the Alliance will enable companies to provide broadband connectivity at a reasonable cost. The WSA will also act as an enabler of the emerging white spaces ecosystem by helping to put in place interoperability, conformance, and compliance testing to make sure that our member stakeholders get the needed information & collaborations to succeed both in the market place and with regulatory requirements. WhiteSpace Alliance will promote the use of IEEE, 3GPP and IETF Standards for use in the WhiteSpaces.
3. Regulators in many national administrations have recognized the importance of the Television Band White Spaces (“TVWS”) spectrum. There is an on-going discussion about the most appropriate use of the TVWS and the benefits of licensed versus the license-exempt usage as part of a conversation about the future use of the television bands generally. Currently in the United States the TVWS frequency band is identified for license-exempt use and the associated technical rules dictate how the devices in that frequency band are required to operate.

¹ In the United States, the term “Unlicensed” is used in lieu of “License-exempt”.

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4. Across industries the use of the TVWS spectrum is vital, given its propagation characteristics, improved building penetration and enhanced regional and rural coverage.
 5. WhiteSpace Alliance urges that spectrum should not remain unused if there are radio technologies that can make opportunistic use of the spectrum. Licensed use should emphasize interference protection rather than exclusive use. Therefore, the existence of licensed service should no longer prevent other innovative uses, provided that protection for the licensed users is maintained.
 6. Today, within the frequencies best suited for mobile broadband services, there is more than five times as much spectrum available for licensed use as there is for license-exempt use.
 7. It is worth noting that significant innovations in wireless communications technologies such as Wi-Fi™, Bluetooth™, ZigBee™, IEEE 802.22 Wireless Regional Area Networks, also known as Wi-FAR™ were made possible by the FCC's vision in creating license-exempt spectrum. It should be noted that wireless cellular service providers are extensively using license-exempt spectrum for cellular offload. This reduces congestion, provides network redundancy, and high data rates while ensuring quality services in a cost-effective manner. Provision of more license-exempt spectrum and allowing opportunistic use of the new licensed spectrum will foster further useful applications while protecting the licensed users.
 8. WSA supports the establishment of a regulatory framework permitting the use of *license-exempt* technologies and opportunistic use of licensed spectrum by cognitive license-exempt devices in the TV Bands.
 9. License-exempt use of TVWS spectrum could support high speed internet applications such as regional area networks, healthcare, education, smart utility networks, disaster recovery, environment monitoring, critical infrastructure monitoring, border protection, homeland security, and other countless innovative areas.
 10. WSA is developing and adopting numerous standards for a wide variety of applications including regional and rural broadband access, smart grid, cellular offload and hotspot support, healthcare and others within the regulatory framework established by the FCC including TVWS. WSA is developing a number of industry standards and amendments to standards that provide wireless communications services in the TVWS.
 11. WSA respectfully submits its position endorsing *license-exempt use and opportunistic use of licensed spectrum by cognitive license-exempt devices in the Television band Spectrum*. We believe that opening up TVWS spectrum to cognitive radio sharing technology can spur innovation to address meaningful communications needs of consumers, businesses and governments. WSA commends the FCC for maintaining a global leadership role in supporting license-exempt use of the

spectrum and enabling the evolution of such services as Wi-Fi™, smart grid, RFID, IEEE 802.22 Wi-FAR™ (Wireless Regional Area Networks) and others. We hope that the FCC will continue to play a leadership role by allowing substantial amount of spectrum to be opportunistically accessible by license-exempt devices in TV Bands, thus supporting both new innovations and expansion of current services. WSA looks forward to developing the required standards to support innovative communication services.

Respectfully submitted,

/s/

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cc: Ms. Marlene S. Dortch
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